



Strategic Trends in the Midwest Region

This chapter describes the density and size of farms, the tenure and gender of farm operators, and the organizational structure of farm businesses.

Structure of Agriculture

This section discusses the structure changes in agriculture

The structure of agriculture has changed greatly over the last few decades. The traditional “family farm” has transformed into a diverse and complex business operation that is impacted by everything from environmental laws and permits to global agricultural production and marketing. The make-up of today’s agricultural producers also impacts their decision making and the opportunity for natural resources conservation. To adequately address the needs of farm businesses, NRCS

and conservation partners are striving to better understand the trends of key components that impact today’s agriculture. These trends can be used as a guide for determining customer assistance strategies and initiatives.

When considering how the structure of agriculture has changed over time, one could conclude that the region influences this structure more than any other region of the country. More than 30 percent of all the nation’s farms are located in the eight states

that comprise the region. In 1997, these farms had annual sales of more than \$53 billion, which represents 30 percent of the national market value of all agriculture products sold.

The information in this section is intended to give insights into how agriculture has changed in the region over time, as compared to the rest of the nation, and how these trends may impact the future.

The Midwest Region significantly impacts today’s agricultural production, with 30 percent of the nation’s farms producing over \$53 billion of agricultural products annually.



Farms and Farm Operators

Number of Farms

Historically, more than 30 percent of farms in the Nation have been located in the Midwest Region. This trend has been slowly declining. In 1997, there were 574,000 farms in the region. These farms encompass 168 million acres or 18 percent of the nation's total land in farms. (see figure 1)

Since 1978, the total number of farms has declined by 184,000 in the region. This represents a 24 percent decrease. Even with the annual decrease slowing since 1992, we still continue to lose over 4,200 farms annually. This trend indicates that current agricultural production in the region comes from about one-fourth fewer farms than 20 years ago. Even with these declines, each of the region's 652 NRCS field offices have an average of 900 farms to assist with conservation planning and natural resources protection. NRCS and conservation partners will need to position their workforce and resources to best meet the needs of these changing farm operations.

1997 Number of Farms

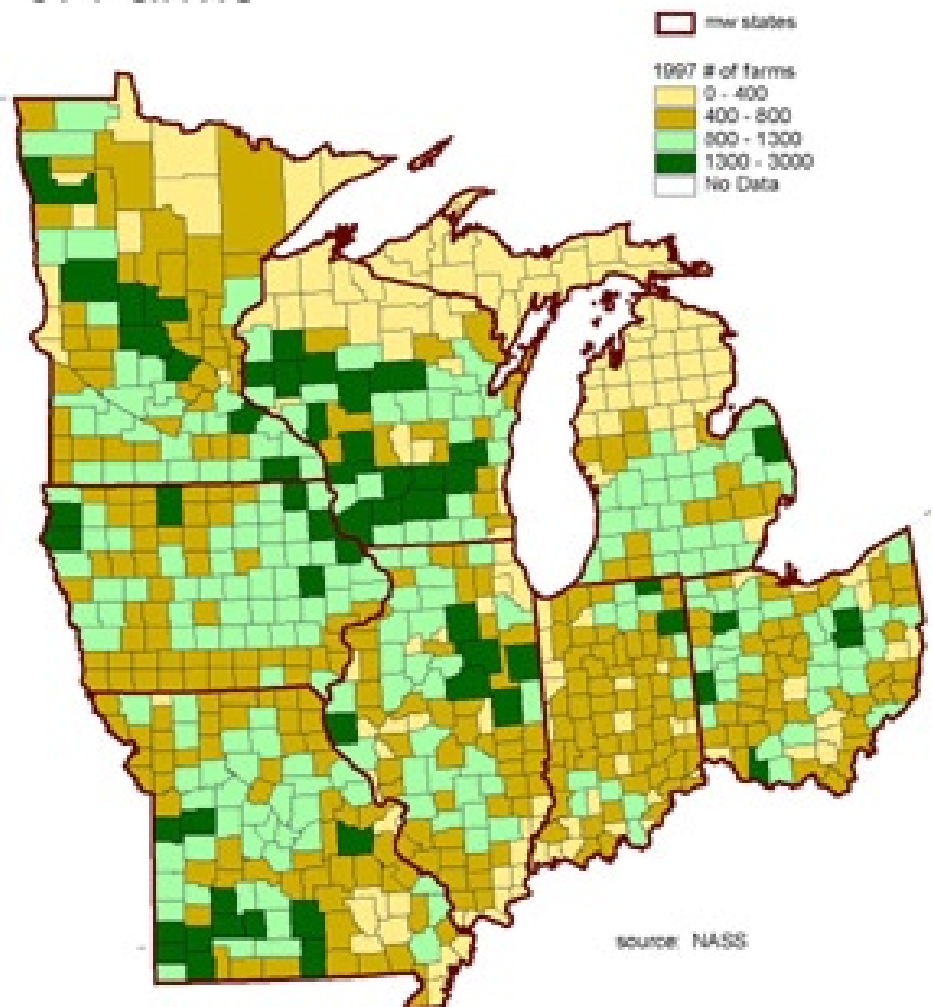


Figure 1

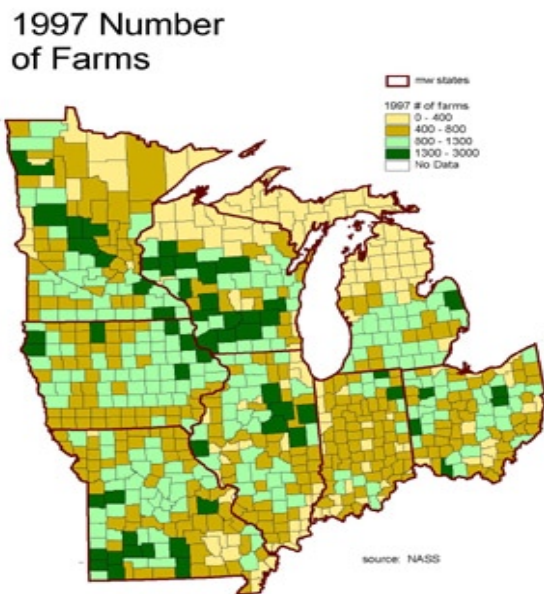


Figure 2

Source: NASS

Each of the region's 652 NRCS field offices have an average of 900 farms to assist with conservation planning and natural resources protection. (see figure 2)

The number of farms in the region has declined at different rates over time. From 1987-1997, there was a 13.5 percent reduction of the number of farms, the smallest decline since 1969-1978. (see figure 3)

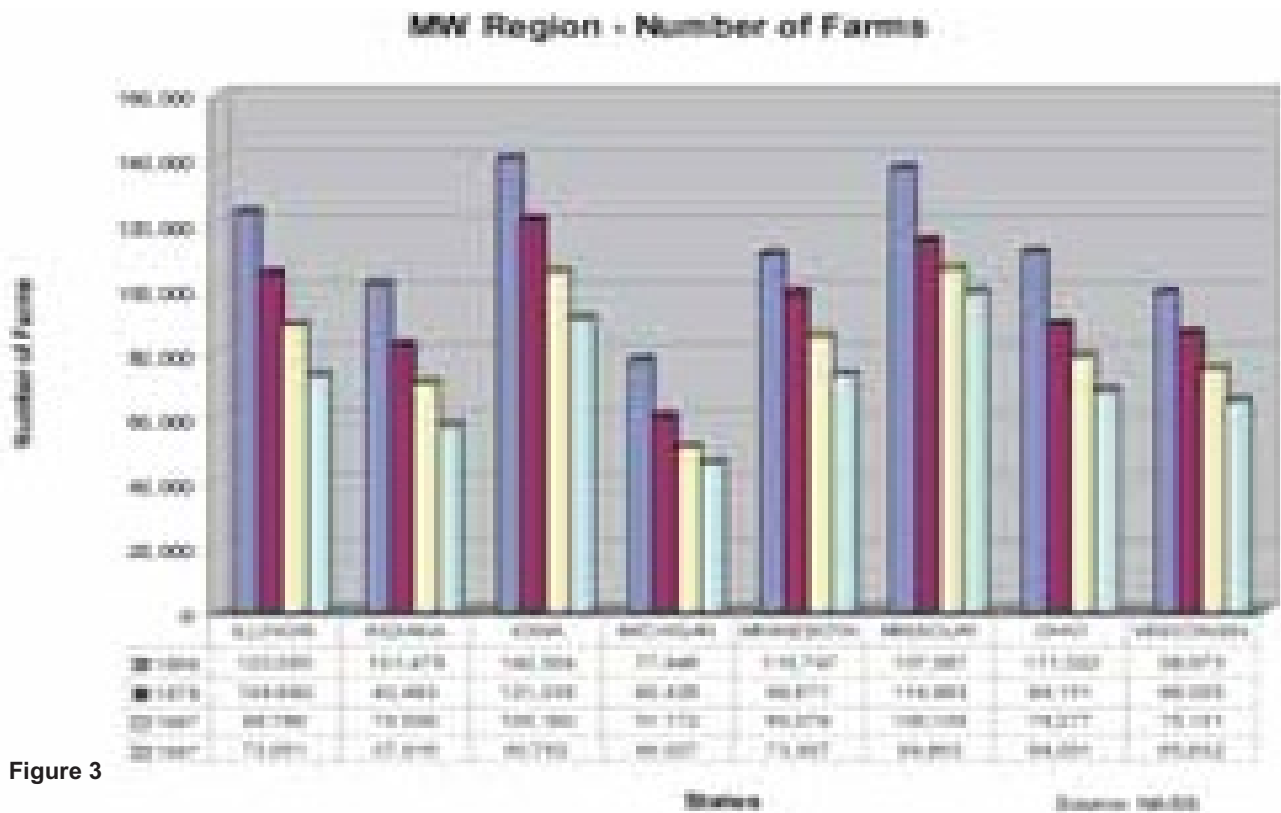


Figure 3

Farm Size by Acres

The number of farms in the Midwest Region that are fewer than 500 acres has decreased significantly over the last 30 years. During this same period, the number of farms between 500 and 1,000 acres increased moderately. However, the number of farms with more than 1,000 acres has nearly quadrupled since 1969. In 1997, farms over 1,000 acres in size represented about 6 percent of the region's farms. (see figure 4)

This trend indicates that the average farm size in the region has increased to more than 290 acres. This represents a 38 percent increase since 1969. In 1997, the average farm size ranged from a high of 372 acres in Illinois to a low of 206 acres in Ohio.

The trend toward farms with more than 1,000 acres is expected to continue as a result of population increases, agricultural land being threatened by conversion to other land uses, and the farm economy driving small farmers out of the agricultural industry.

Midwest Region - Number of Farms by Size Categories

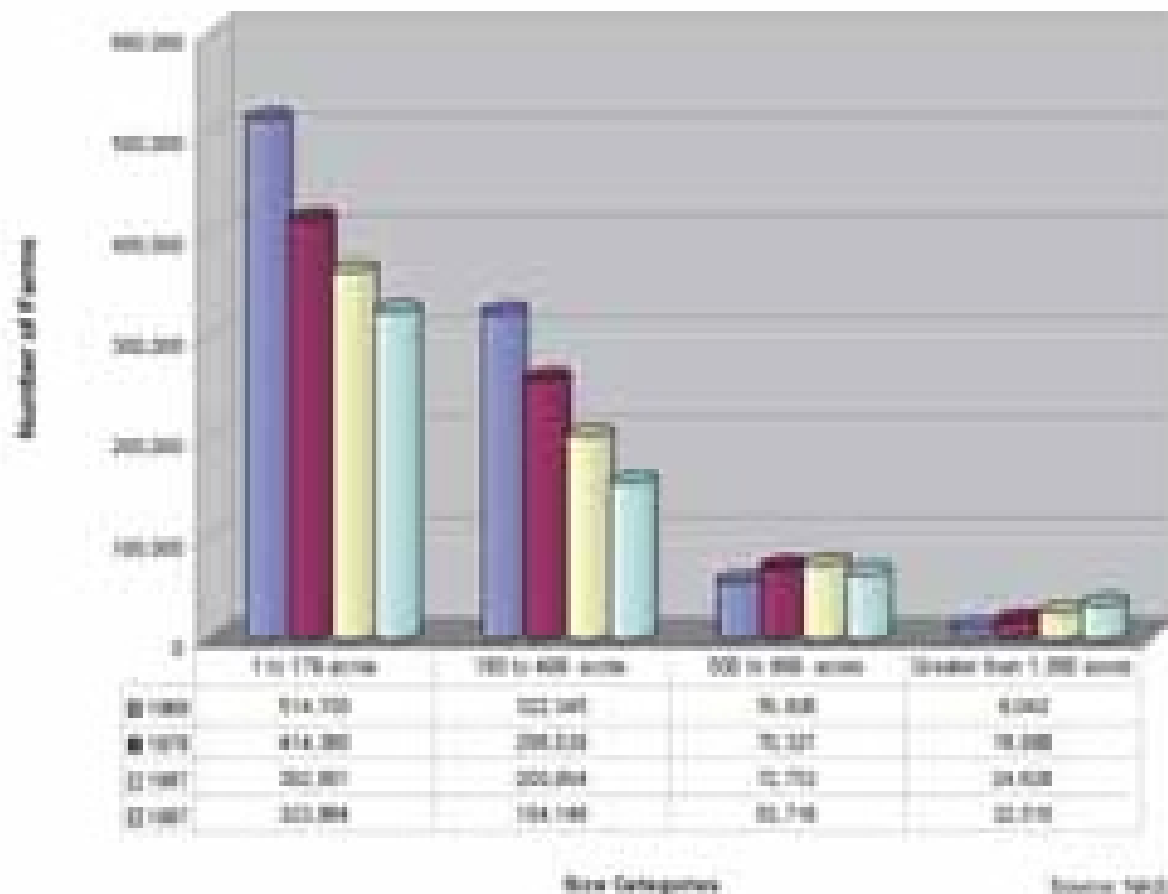


Figure 4

Farm Size by Sales

The market value of products sold is another component to measure farm size. The number of farms with more than \$100,000 of annual sales has increased by more than 60 percent since 1978. These large farms comprise 23 percent of all the Midwest

Region farm operations. However, in 1997, these large farms generated more than 83 percent of the total value of agricultural sales in the region. On the other end of the scale, small farms with less than \$10,000 in

annual sales have declined since 1978. However, this group has increased 8 percent from 1992-1997. This trend will most likely continue with the expansion of small part-time operators that generate lower volumes of sales. (see figure 5)

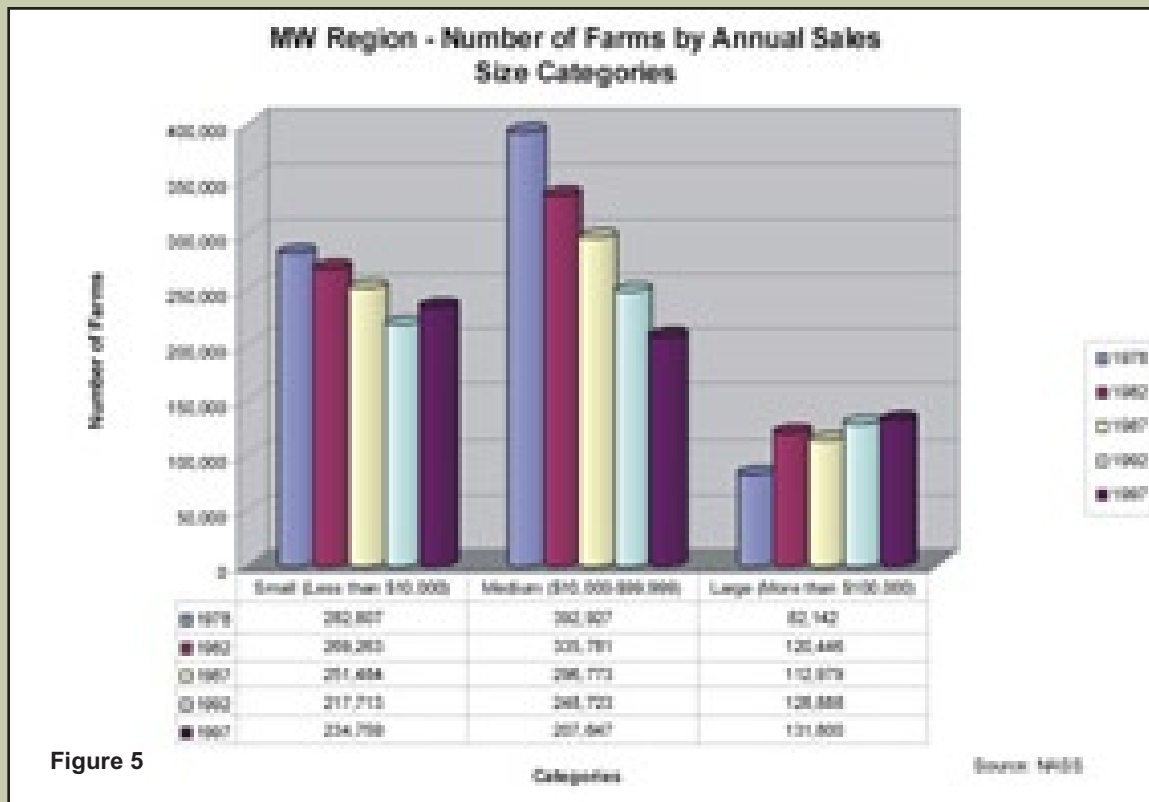
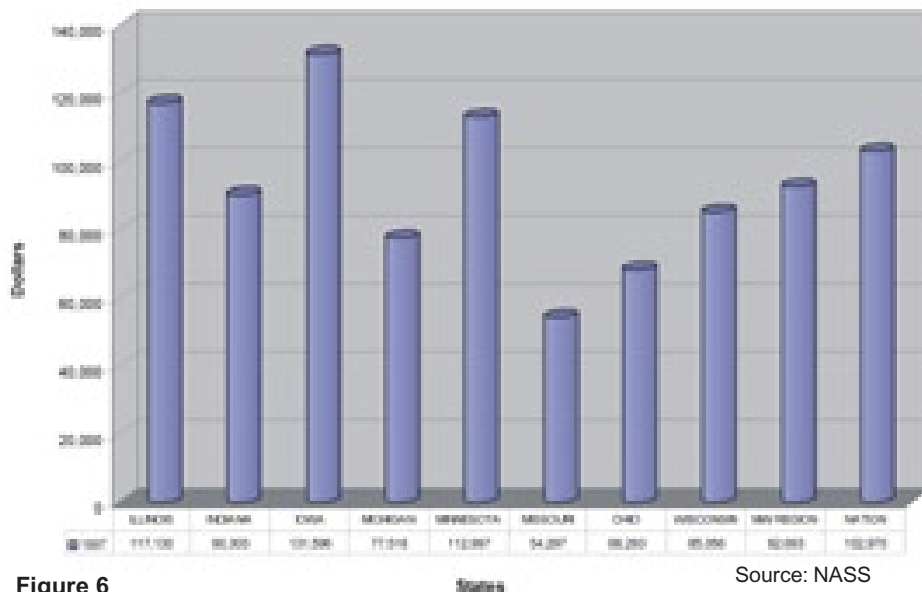


Figure 5

MW Region - 1997 Average Market Value of Sales Per Farm



In 1997, the average market value of sales per farm was \$92,693 for the region, compared to a national figure of \$102,970. (see figure 6)

Production within the region is diverse with 55 percent of the annual farm sales associated with crop production and 45 percent related to livestock production. This diverse production requires NRCS and conservation partners to provide the needed technology that will help farmers address a multitude of natural resource issues and concerns.

Figure 6

Tenure of Operators

Another important component of the structure of agriculture is the tenure of farm operators. In 1997, there were about 117 million acres associated with farms where operators were part-owners or tenants. This indicates that up to 70 percent of the land in farms in the Midwest Region could be operated by someone other than the owner. The national level was 65 percent in 1997. (see figure 7)

NRCS and conservation partners work with both the landowner and the operator to plan and implement conservation practices on their land. This increases the complexity of conservation planning and requires additional staff time to provide adequate assistance.

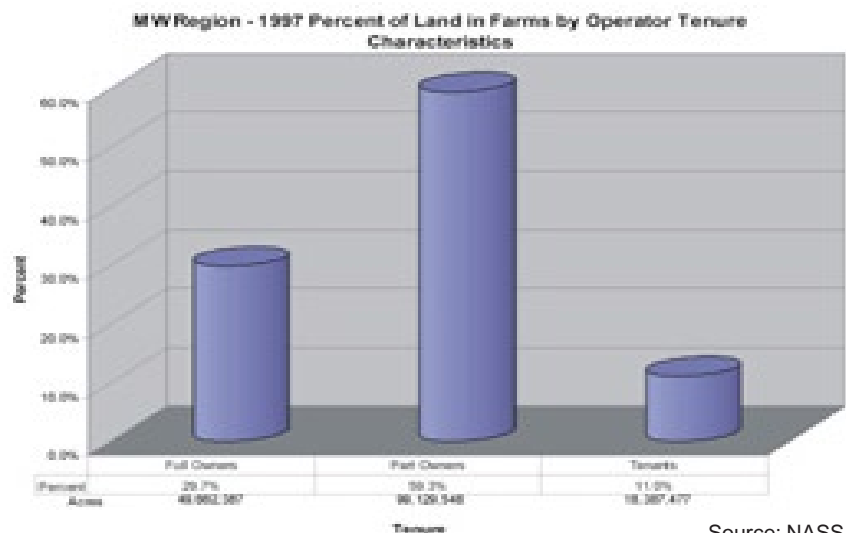


Figure 7

Source: NASS

Note: Example of each tenure category

- Full Owner: Farmer owns and operates acreage
- Part Owner: Farmer owns and operates acreage and operates additional acreage on other farms
- Tenants: Farmer does not own land but operates acreage on farm(s).

Gender of Operators

Gender is another important consideration. Although males dominate the operators' population (93 percent) in the region, there is an upward trend in the number of female operators (from 4 percent of the total in 1987 to 6 percent in 1997). In 1997 there were 36,600 farms operated by females in the Midwest, which is about 22 percent of all the farms operated by females throughout the country. The percent of female operators compared to male operators in the region continues to remain below the national percentage. However, the percentage of females is increasing over time at the same rate regionally as it is nationally. (see figure 8)

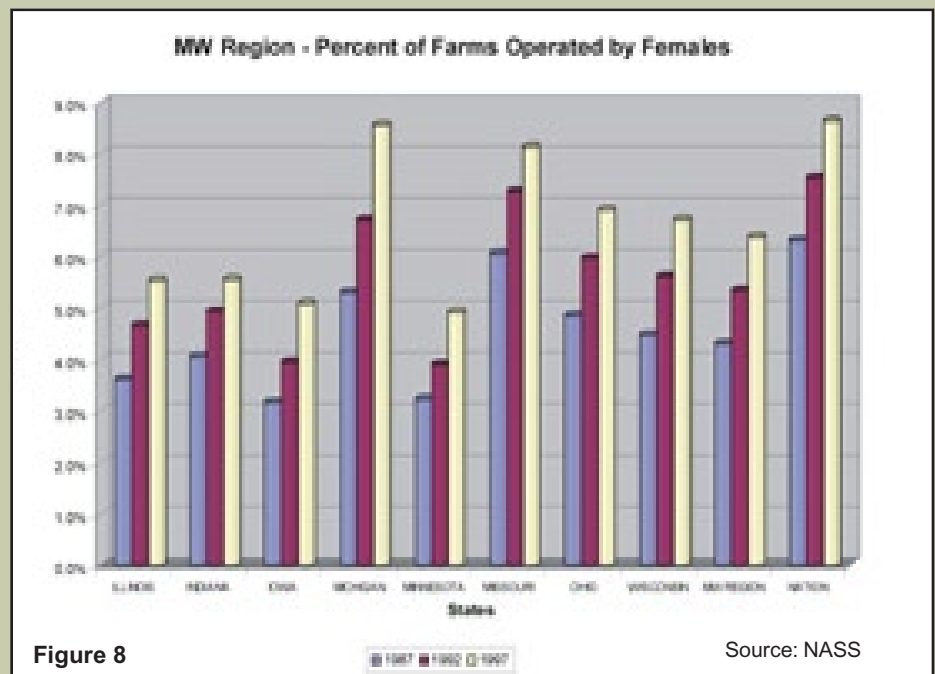


Figure 8

Source: NASS

Farm Organization

Ownership Type

In the Midwest Region, about 95 percent of the land is privately owned compared to 70 percent nationally. The responsibility for stewardship of this land is in the hands of thousands of landowners who make decisions on proper care and management of the natural resources. The knowledge, creativity, skill, and commitment to conservation of each landowner determines the overall health and productivity of the land. NRCS employees are committed to helping farmers and ranchers care for the land through the planning and implementing of conservation systems. (see figure 9)

The type of customers that NRCS provides assistance to is constantly changing. One indicator of the changes is the farm organization related to ownership type. Data indicates that

sole proprietorship and partnerships are declining within the region; whereas, corporations, cooperatives, estates, and trusts are increasing. Even though the number of sole proprietorships has decreased since 1978, this group has maintained about 86 percent of the region's farms. This indicates that sole proprietorship farms are declining at about the same rate as total farms within the region. During the period of 1978 to 1997, for every ten farms lost, about nine were sole proprietorship.

The one organization ownership type that has consistently increased since 1978 has been corporations (up 95 percent). This group now represents more than 4 percent of all farms

within the region and controls about 10 percent of all the land in farms. Even though these farms are organized as corporations, in 1997, more than 90 percent were family held. It is estimated that the land managed by corporations will continue to increase due to financial advantages of this structure and large corporate entities expanding their production operations.

These variations in ownership type add a significant level of complexity to the decision-making process and impact the way that NRCS works with decision-makers to address natural resource issues and concerns.

MW Region - 1997 Percent of Farms by Organization Ownership Type

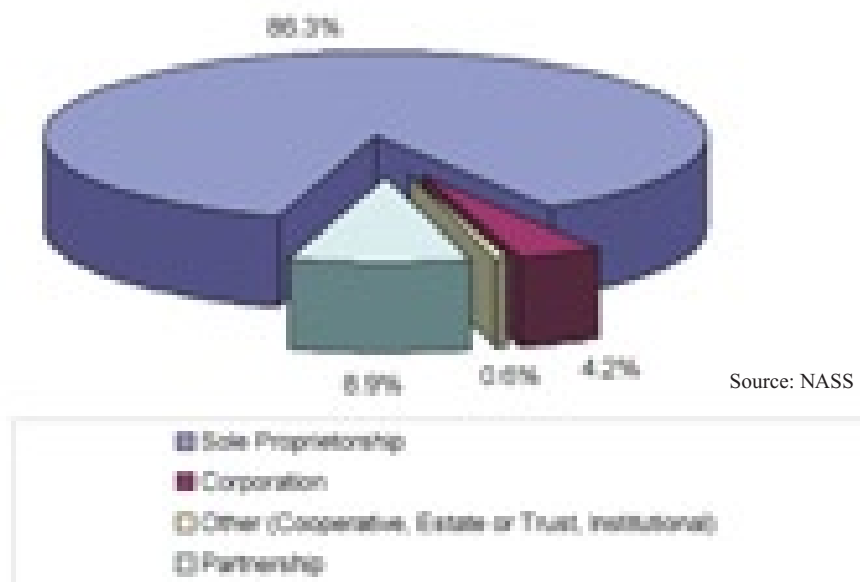


Figure 9

Summary of Structure of Agriculture

The changes that have occurred in the make-up of today's agriculture greatly impact the agencies that provide assistance to farmers. Understanding these changes can help NRCS and its partners predict the type of assistance that farmers will need in the future. These changes will also help shape the type of delivery system that NRCS and its partners will utilize to provide assistance in the future.

Midwest Region Structure of Agriculture Facts

- Thirty percent of the nation's farms are located in the Midwest Region.
- The number of farms decreased by 24 percent over the past 20 years and is currently declining at a rate of 4,200 per year.
- The number of farms with more than 1,000 acres has nearly quadrupled since 1969.
- The average size of farms continues to increase, with the current farm size just over 290 acres, which represents a 38 percent increase from 1969 to 1997.
- In 1997, 23 percent of the region's farms generated more than 83 percent of the total value of agricultural sales in the region.
- The number of small farms with less than \$10,000 in annual sales has increased by 8 percent from 1992-1997.
- Fifty-five percent of annual farm sales come from crop production and 45 percent relate to livestock production.
- More than 117 million acres (70 percent of the land in farms) could be operated by someone other than the owner.
- In 1997, the number of farms operated by females increased to 36,600. Twenty-two percent of the nation's female farm operators are located in the region.
- The number of farms in the region that are organized as corporations have increased by 95 percent since 1978 and now control more than 10 percent of all land in farms.

Production

This section describes the significant crops and livestock produced in the region.

Agricultural production involves both crops and livestock and is very important to the overall economic viability of the Midwest Region. Any fluctuations have regional, national, as well as international impacts.

Livestock Production

Livestock production has always been a significant enterprise in the Midwest Region. (see figure 10) In 1997, the region's livestock numbers included:

- **36 million hogs and pigs**
(59 percent of the nation's inventory);
- **3 million dairy cattle**
(34 percent of the nation's inventory);
- **18 million cattle & calves**
(34 percent of the nation's inventory);
- **98 million turkeys**
(33 percent of the nation's sales); and
- **97 million chickens**
(31 percent of the nation's sales).

Iowa, with almost 15 million hogs and pigs in 1997, was the industry leader outright with 41 percent of the region's and 24 percent of the Nation's inventory. While the region's hogs and pigs in inventory increased slightly, the number of farms with hogs and pigs decreased dramatically by 55 percent. However, in 1997, the region had 51 percent of the nation's hog and pig farms.

Dairy cow numbers have decreased about 25 percent within the region, with all states showing losses from 1987 to 1997. Wisconsin had 15 percent of the national dairy cow inventory and was the region's leader with 43 percent of the inventory in 1997.

Cattle and calf numbers for the region declined from 21 million head (22 percent of the nation's total) in 1987 to 18 million head (18 percent of the nation's total) in 1997. Missouri was the only state with a slight increase in cattle and calves. All other states declined. Similarly, the number of cattle and calf farms decreased across all states to 267,000 farms for the same time period. Missouri had the highest number - 67,000 farms for 1997.

The number of poultry farms continues to decline across all states from 1987 to 1997. In 1997, there were 26,000 poultry farms in the region compared to 47,000 in 1987 (45 percent decrease). Sales in the region grew from \$1.9 billion in 1987 to \$3.5 billion in 1997.

1997 TOTAL ANIMAL UNITS on livestock farms

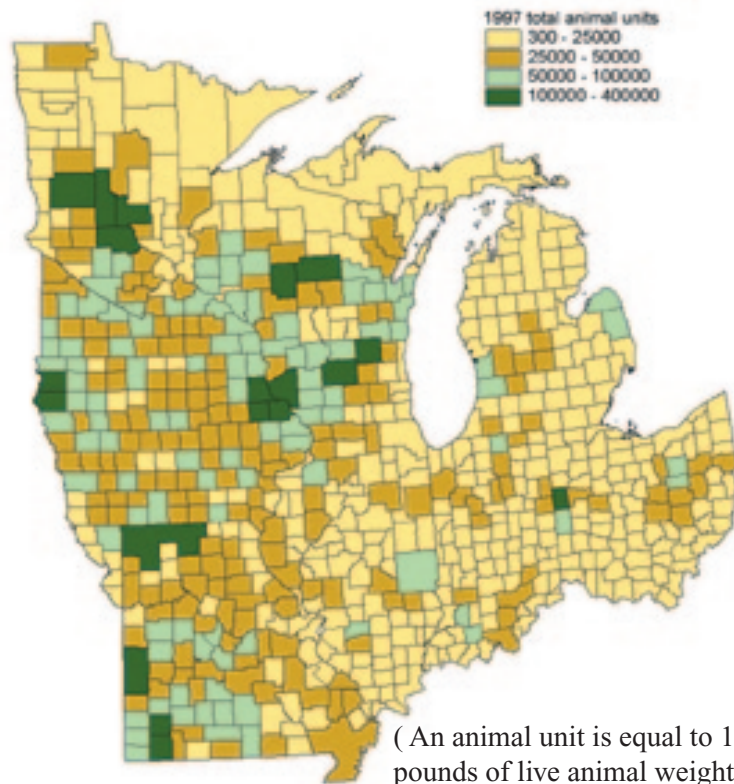


Figure 10

Crop Production

Corn remains the Midwest Region's dominant agriculture crop, with 6.4 billion bushels produced in 1997. That is 66 percent of the nation's total corn production. Acres of corn for seed or grain production grew from 39 million acres in 1987 to a high of 46 million acres in 1992. However, it dropped slightly to 45 million acres in 1997. (see figure 11)

Soybeans came in second with 1.8 billion bushels produced in 1997. (see figure 12) That is 70 percent of the nation's total soybean production. Over 35 million acres were in production in 1987 for the region. This increased to 42 million acres in 1997. Iowa, Illinois, and Minnesota have the most acres in cropland for corn and soybean production in the region.

There is a growing tendency to think of these two crops as more than 'just corn and soybeans.' They are now being separated into specific categories based on characteristics within the grain. High oil and protein corn are now being grown separately for specific markets. Separation and certification of Genetically Modified Organism (GMO) grain from organically grown grain is emerging with changes in handling and selling of grain.

Wisconsin, Missouri, and Minnesota are the three leading states in the region with 15 million acres of hay production for 1997. This is a drop from a high of 17 million acres in 1987. Missouri is the only state with an increase in the number of hay acres from 1987 to 1997. Missouri leads the region with 3.6 million acres of hay in 1997. Wisconsin had 4.7 million acres in 1987, but has dropped to 3.5 million acres in 1997 due to the declining dairy industry in the state.

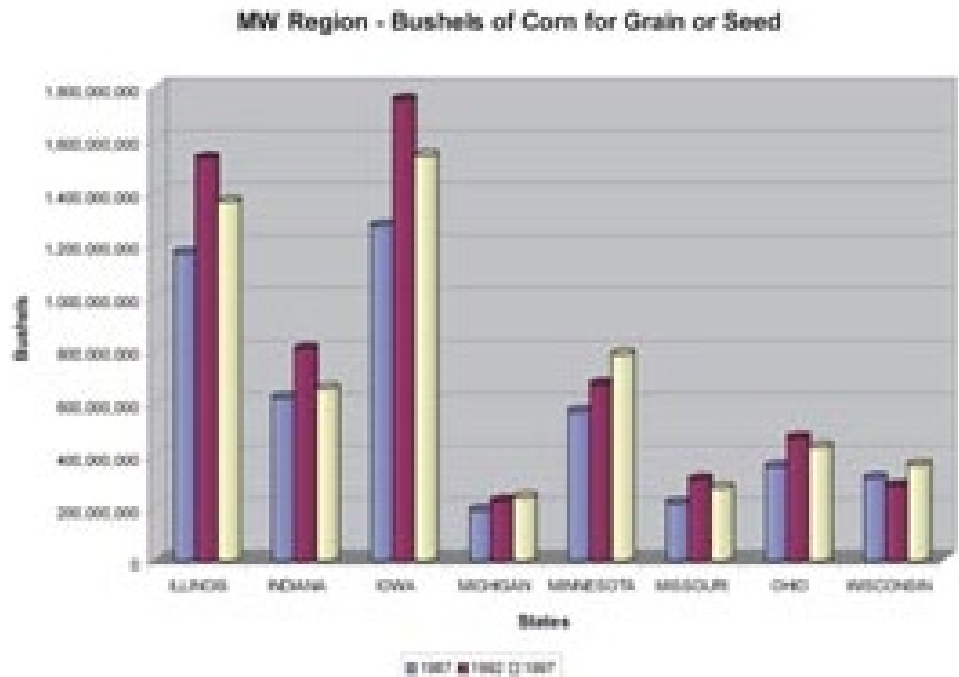


Figure 11

Source: NASS

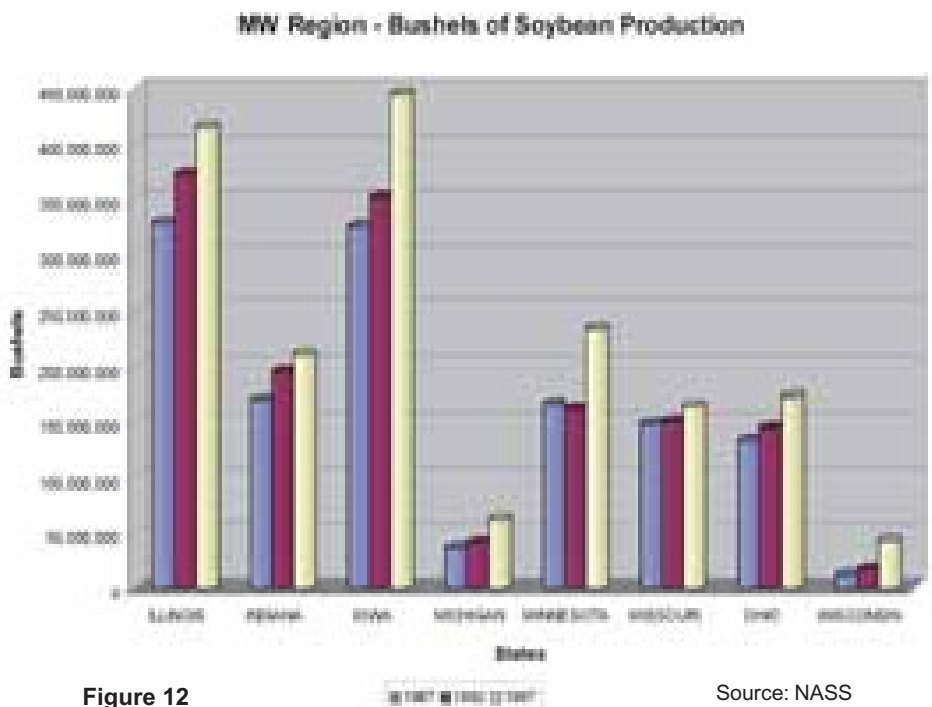


Figure 12

Source: NASS

Specialty Crops

The Midwest Region produces a variety of significant food crops for the nation. (see figure 13) For instance, in 1997, Wisconsin produced 42 percent of the nation's cranberry production (2.3 million barrels). Minnesota, Wisconsin, and Illinois processed 49 percent of the nation's sweet corn for 1997. Minnesota, Michigan, and Ohio grew over 11 million tons of sugar beets in 1997, or 38 percent of the nation's total production. In 1997, there were over 780,000 acres dedicated to growing vegetables for the region, roughly one-fifth (22 percent) of the national total. This is a decrease from 850,000 acres in 1987.

Forests

Forests contribute significantly to the overall environmental and economic health for the Midwest Region. Forestland comprises over 84 million acres, or 29 percent, of the region's land cover.

There are 350,000 workers employed in forest industries throughout the region generating a payroll of over \$10 billion. These workers produce a variety of products from paper to lumber. The value of industry shipments of lumber and paper products add up to over \$64 billion for the region.

Grazing Lands

In the Midwest Region, there are over 29 million acres of grazing lands, which make up 10 percent of the region's land base. This important resource provides many valuable benefits to society. Well-managed grazing lands support vegetative cover, which is resistant to wind and water erosion and provides a sustainable form of agriculture. They contribute to clean water, abundant wildlife, recreation opportunities, economic stability, and open space.

Midwest Region Cash Receipts: Top 5 Commodities in Each State, 1997

Rank	Illinois		Indiana		Iowa		Michigan	
	Commodity	Cash Receipts	Commodity	Cash Receipts	Commodity	Cash Receipts	Commodity	Cash Receipts
		million dollars		million dollars		million dollars		million dollars
1	Corn	3,524	Corn	1,600	Corn	3,777	Dairy Products	732
2	Soybean	3,107	Soybean	1,550	Soybean	3,293	Greenhouse/nursery	433
3	Hogs	1,011	Hogs	805	Hogs	2,957	Corn	419
4	Cattle and Calves	513	Chicken eggs	300	Cattle and Calves	1,652	Soybean	402
5	Dairy Products	711	Dairy Products	279	Dairy Products	527	Cattle and Calves	218

Rank	Minnesota		Missouri		Ohio		Wisconsin	
	Commodity	Cash Receipts	Commodity	Cash Receipts	Commodity	Cash Receipts	Commodity	Cash Receipts
		million dollars		million dollars		million dollars		million dollars
1	Soybean	1,511	Soybean	1,180	Soybean	1,360	Dairy Products	2,948
2	Corn	1,325	Cattle and Calves	901	Corn	904	Cattle and Calves	614
3	Dairy Products	1,200	Corn	781	Dairy Products	583	Corn	606
4	Hogs	1,169	Hogs	779	Greenhouse/nursery	525	Soybean	249
5	Cattle and Calves	975	Broilers	403	Hogs	413	Hogs	194

Figure 13

Source: NASS

Summary of Production

Agricultural production has an important impact on the overall economic viability of the Midwest Region. Livestock production has always been a significant enterprise including: hogs, pigs, dairy cattle, other cattle and calves, turkeys, and chickens. A variety of significant food and feed crops are produced for the Nation in the region, with corn and soybeans being the largest commodities.

Midwest Region Agriculture Production Facts

- Over 66 percent of the nation's corn is produced in the Midwest Region.
- Over 70 percent of the nation's soybeans are produced in the region.
- In 1997, there were over 780,000 acres of vegetables in the region, which is roughly 1/5 (22 percent) of the nation's total.
- In 1997, the region had more than 59 percent of the nation's hogs, with Iowa having 24 percent of the nation's hogs.
- In 1997, Wisconsin had 15 percent of the nation's dairy cows.
- The number of poultry farms declined over 45 percent from 1987 to 1997; however, the poultry sales increased from \$1.9 billion in 1987 to \$3.5 billion in 1997.

Inputs

This section discusses precision farming as it relates to agricultural inputs.

Precision Agriculture

Traditionally, farmers follow the concept of whole-field management. Farmers treat fields as a single area in which uniform applications of seed, fertilizer, and herbicide are applied even though the topography and soils may vary.

Precision Agriculture, or site-specific management, treats the variability as it relates to crop conditions, topography, and soils. This variability is best captured by a variety of ground, airborne, and satellite remote sensors. Many of these sensors are linked to Global Positioning System (GPS) receivers.



Source: PPI

NRCS Applications

Digital orthophotos and soils maps are two key components to any successful precision agriculture system. NRCS is funding the creation of digital orthophotos nationwide with the support of the United States Geological Survey (USGS). In addition, NRCS is in the process of converting all the soil atlases into digital form nationwide.

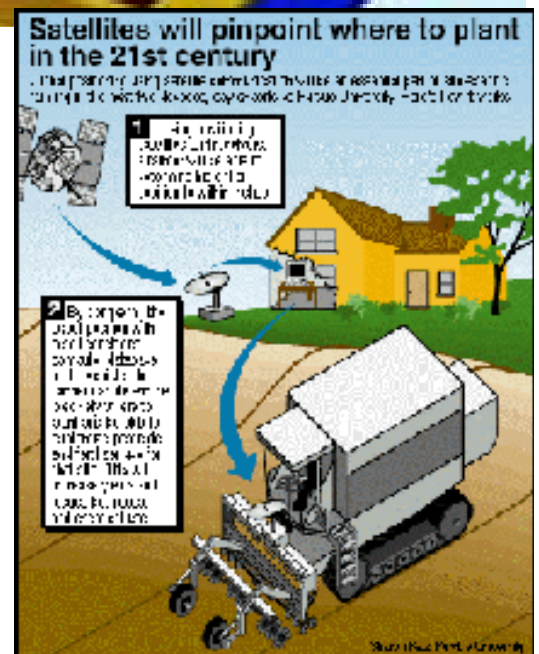
Summary

The key difference between conventional farming and precision agriculture is the application of modern information technologies. This allows producers to make decisions, which affect management of crop production. The most significant impact of precision agriculture is likely to be on how management decisions address variability in crop production systems.

Example

In 1995, there were very few GPS controlled grain quantity yield monitors. By 1998, approximately 19,000 combines in the Midwest Region were equipped with grain quantity yield monitors and of those, 50 percent had GPS units. In 1999, the number of grain quantity yield monitors increased to 25,000 and 75 percent were equipped with GPS units.

Similarly, grain quality yield monitors will be sold in the year 2001. These new monitors have the ability to quantify the amount of nutrients removed after each crop allowing the farmer to precisely apply nutrients for the next growing season.



Source: PPI

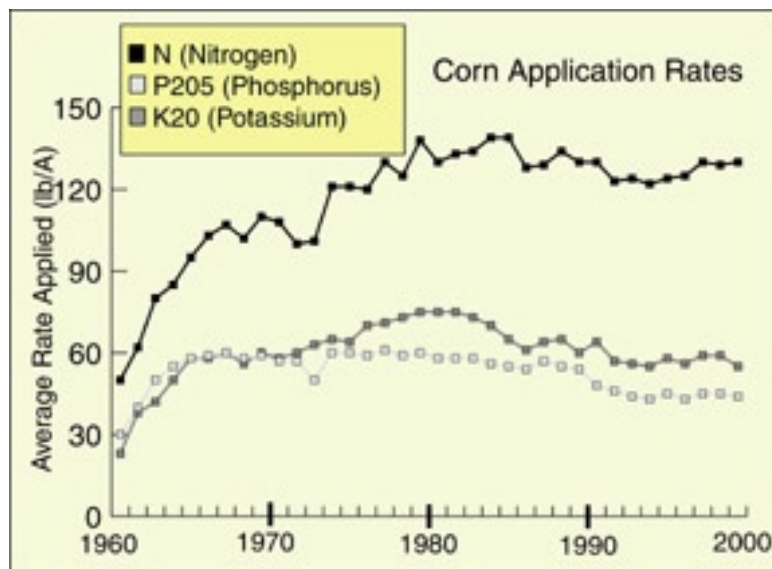
Precision agriculture has the potential to:

- Reduce costs
- Increase production
- Reduce environmental impacts

Trends in Fertilizer Use Efficiency

During the last quarter of a century, fertilizer use has been steady or lower and fertilizer efficiency has improved dramatically. Consider the following:

- Since the early 1980s, nitrogen use on corn has leveled off while phosphate and potassium use has declined;
- Fertilizer use efficiency (measured in terms of fertilizer units per bushel of corn or soybeans produced) has been increasing for more than 30 years. Comparing 1970 to 1998, nitrogen use efficiency on corn grown in the U.S. has increased 28 percent, while potassium and phosphate use efficiencies have jumped 127 and 75 percent, respectively. (see figure 14)



Source: PPI

Figure 14 - Utilization of animal manure will have to become an even more significant part of the management system of tomorrow's farmers and not just for livestock producers.

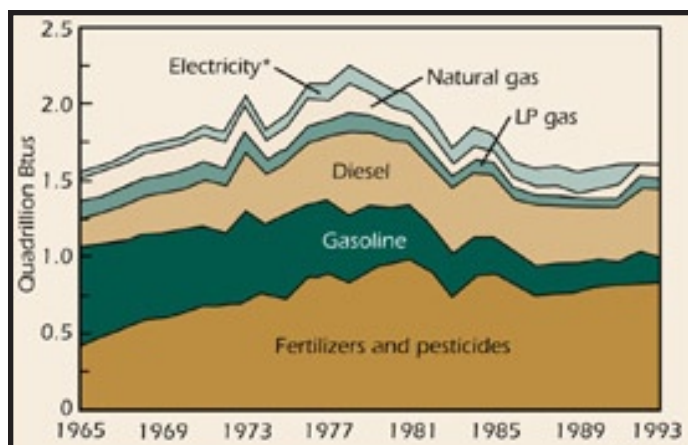
Energy Use

Nationally in the agriculture sector, energy use (in terms of electricity, natural gas, LP gas, diesel, gasoline, fertilizers, and pesticides) rose steadily between World War II and 1980. Since then, energy use has decreased an estimated 10 percent. The production of pesticides and fertilizers is using

more energy due to their increased application, while petroleum fuel for tractors, combines, etc., have remained constant. (see Figure 15)

Animal Manure and Nutrient Management Planning

The use of animal manure will continue to impact nutrient management planning and fertilizer use. In 1996, the Council for Agricultural Science and Technology (CAST) released a comprehensive report titled *Integrated Animal Waste Management*. The report dealt with the replacement potential of animal manure. It estimated that 3.55 million tons of nitrogen, 3.06 million tons of phosphate, and 3.68 million tons of potash are potentially available for the replacement of fertilizers. On a percentage basis, manure nutrients are equivalent to 29 percent of the N and 68 percent of the P and K currently used as commercial fertilizers.



Source: DOE

Figure 15. Energy use in production agriculture, 1965-93.
*No data on electricity use since 1991.

Summary of Inputs

In the past, the most productive U.S. farmers were the farmers who adopted new technologies to help them become more efficient and profitable. In order for U.S. farmers to compete in the global market, they must become even more efficient by adopting precision agriculture technologies. Farmers will be ‘farming the soil’ instead of the field. Not only will this increase their profits, but it will also be more environmentally friendly. USDA has a unique opportunity to jump start precision agriculture just as it has done in the past with other technologies, such as conservation tillage practices.

Midwest Region Agricultural Inputs Facts

- By promoting new precision agriculture practices and fertilizer use, fuel could be conserved.
- Adoption of precision agriculture technologies will increase farmers’ profits.
- USDA has an opportunity to assist farmers in implementing precision agriculture, much like it did with conservation tillage practices.
- Implementing precision agriculture could reduce fuel and fertilizer usage.

Farm Economy

This section focuses on the current condition of the farm economy and conservation budget in the region.

Farmers today face an array of problems that may be comparable to those experienced during the depressed farm economy of the 1980s. Farm income dropped an estimated 16 percent in 1999 and economists foresee the potential for further decline on the horizon. Farmers have been battered by a combination of conditions including weather disasters, weak exports, steeply falling commodity prices, and the reduced safety net offered by the 1996 Farm Bill. On January 1, 1999, USDA data indicated that 25 percent of all commercial farm businesses had a negative farm income during 1998 and an additional 11 percent of all commercial farm businesses had a very high debt-to-asset ratio.

Conservation assistance may have a positive impact on the economic condition of some of the farm businesses that are experiencing hardships. This assistance, both financial and technical, can help farm businesses avoid losses related to natural hazards, minimize outlays for off-farm inputs, reduce other cost burdens, and help move toward enterprise diversification.

Conservation financial assistance (in the form of cost share, incentive, and easement payments) can provide farmers and ranchers, who are experiencing negative incomes, a much needed source of cash flow.

Additional conservation resources are needed to address critical natural resource issues in the Midwest Region, such as animal waste management, erosion on cropland and highly erodible land, wetland loss, and urban sprawl.

“Federal resources are one of the main reasons why these issues remain a national concern.”

Former U.S. Secretary Dan Glickman

Currently, we invest \$5 per acre toward management of public lands for every \$1 per acre we invest in private lands. Additional conservation resources could address critical natural resources in the region, and in some cases, provide much needed cash flow to farm operations trying to stay in business.



The application of conservation management and practices has positive impacts on the economic condition of agricultural producers by:

- achieving cost savings through reduced reliance on purchased fertilizer and more effective use of on-farm inputs, such as animal manure;
- reducing operating cost by implementing conservation management practices and methods;
- reducing the cost of meeting certain environmental requirements under state and local laws; and
- reducing local and state property taxes for conservation application.

Farm Economy

Generally, there are no accepted criteria that define a “recession” in a particular industry, such as agriculture. Relative to history, the current drop in farm markets is severe enough to merit the term recession. Since 1957, farm cash receipts have fallen below the previous 5-year average only twice: in 1986 and 1999.

There are two fundamental causes for the weakness in the U.S. farm economy.

1. Farmers in many areas have suffered crop production losses due to disease, drought, pests, and excessive moisture.
2. Imbalances in commodity markets are due to several years of large U.S. production—despite production problems in many areas—and lower exports.

Farm prices for many agricultural commodities are at lows unseen in more than a decade. (see figures 16 and 17)

- Average price for soybeans are the lowest since 1986/87.
- Average price for corn and wheat are the lowest since 1987/88.
- Hog prices have fallen to levels unseen since early 1920s.
- Cattle prices have shown some improvement; however, they remain relatively low.
- Milk prices have fallen to the lowest levels in over a decade.

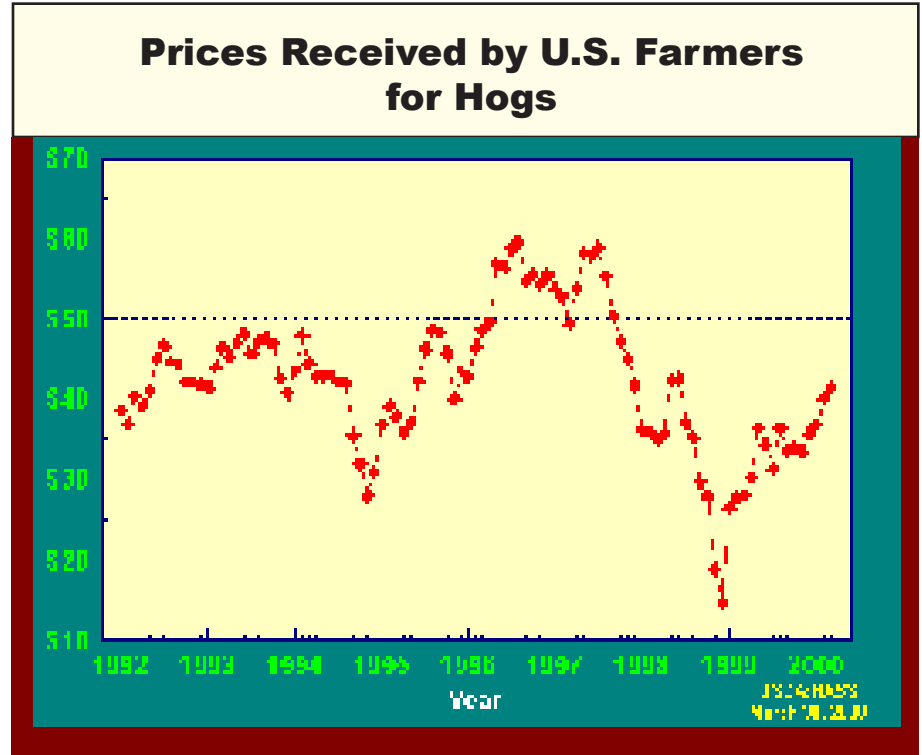


Figure 16

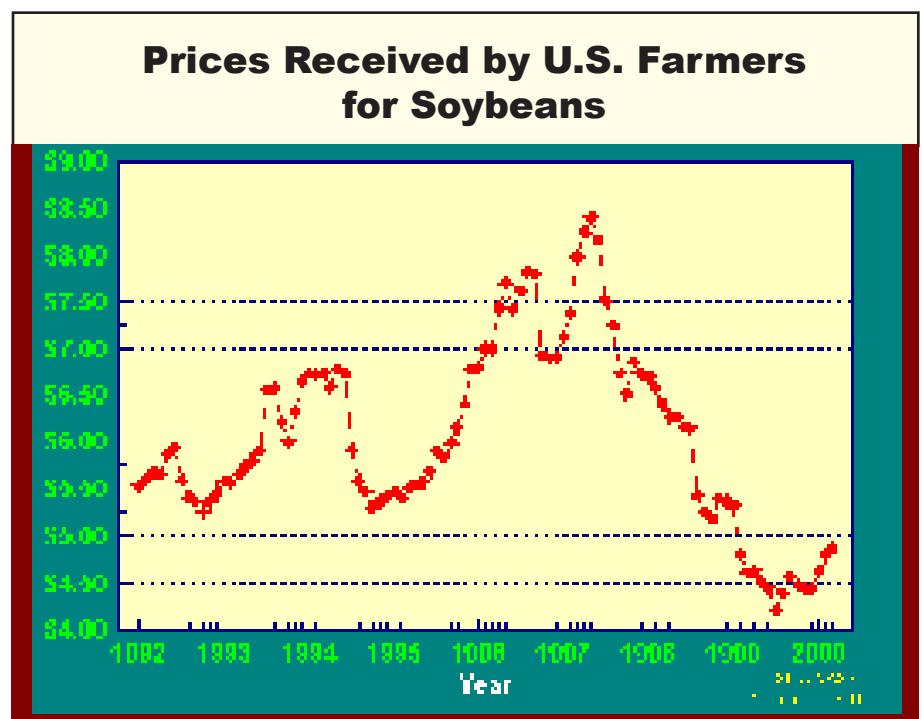


Figure 17

Another component of farm prices is the level of agricultural exports. The value of U.S. agricultural exports fell to \$49 billion in Fiscal Year 2000 after reaching a record high of \$60 billion in Fiscal Year 1996. Export volumes for 1999 and 2000 are higher than in 1998, but low commodity prices have

held the total value down. A reduction in Asian purchases accounts for a large portion of the drop in exports of both bulk and high-value agricultural products. In 1996, \$26 billion in U.S. agricultural products were exported to Asia, compared with an estimated \$18 billion this year, a drop of \$8 billion.

Another concern regarding the farm economy is the rising fuel prices. The cost of gasoline and diesel to operate machinery and power irrigation systems normally accounts for about 10 percent of a farmer's production input costs. If fuel costs continue to increase, it will likely become a significant input cost.

Figure 18 illustrates how the prices farmers must pay for goods continue to increase; whereas, the prices they received for their commodities are declining. The large gap between these two lines represents the current depressed farm economy.

Low prices, increased production costs, and production losses related to weather disasters have all led to reduced farm incomes. USDA estimates farm income to decline to \$40.4 billion which is \$8 billion less than in 1999, a 16 percent decline. Forecasts for 2001 have estimated that farm incomes will decline even further to \$35 billion.

These projections have increased the level of urgency for a safety net for farmers, including federal assistance. Within this assistance, an increase of conservation resources is necessary for NRCS and conservation partners. This assistance will help the already burdened farmers address natural resource concerns.

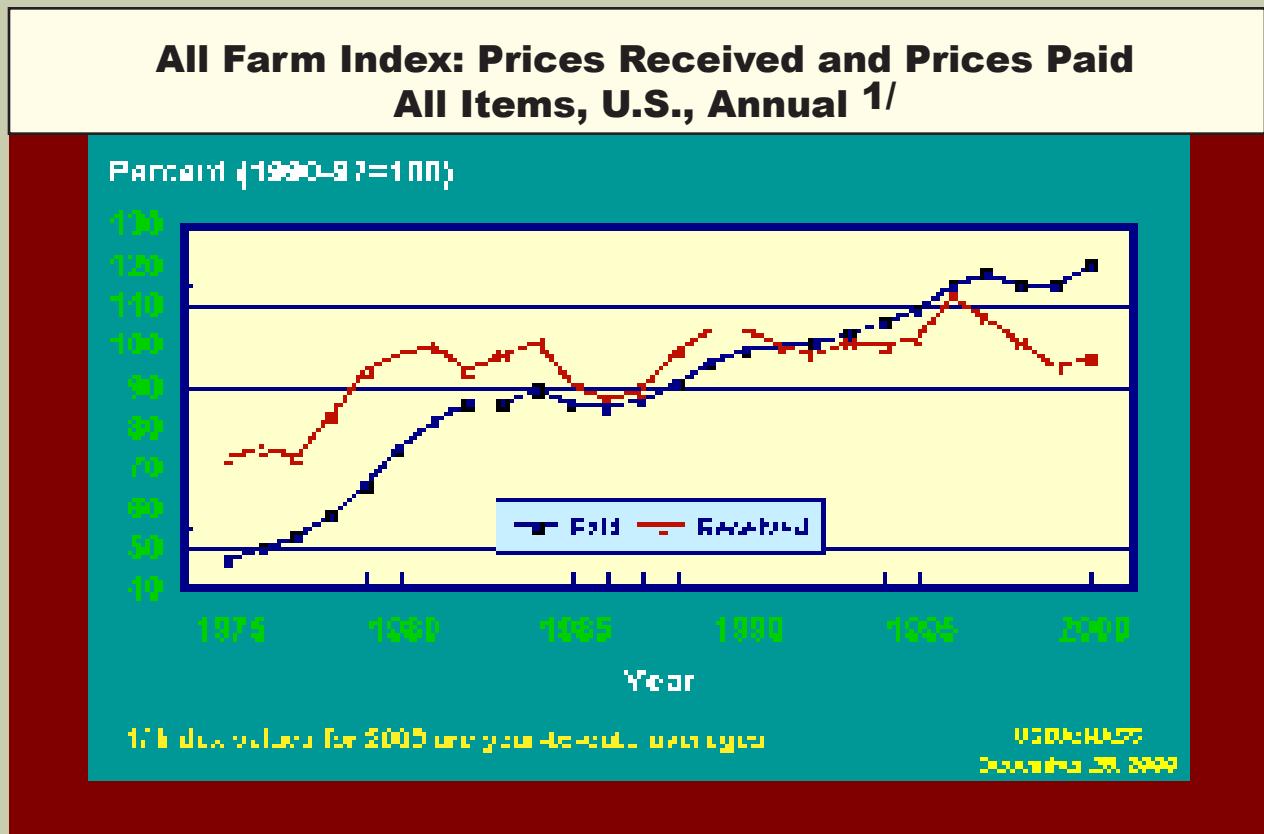


Figure 18

Conservation Financial Assistance

During Fiscal Year 2000, over \$500 million (financial assistance) was provided to private landowners in the eight-state Midwest Region through USDA conservation programs. These programs and the financial assistance included:

- Wetlands Reserve Program (6%);
- Conservation Reserve Program (Regular, Continuous, and CREP) (80%);
- Environmental Quality Incentives Program (5%);

- Emergency Watershed Protection Program (6%);
- Small Watershed Program (2%); and
- Wildlife Habitat Incentives Program (1%).

Program dollars were administered through approximately 120,000 contracts or agreements. NRCS administers these programs and helps land users, communities, and others in planning and implementing conservation systems that protect the environment.

NRCS funding level for both financial and technical assistance has averaged about \$233 million per year for the region, since 1994. For the most part, funding has been level for this time period with fluctuations primarily due to large emergency fund allocations in 1998 and 1999.

Resource Conservation and Development (RC&D)

Through the use of voluntary, non-profit councils, made up of local people, the RC&D helps people address improvement of their local economy, environment, and standard of living.

Currently, 69 RC&D Councils in the Midwest Region help people address these very issues. Councils usually focus on activities and projects related to natural resources, agriculture, community, and social responsibilities. More specifically, they address concerns in community improvement, cultural resources, economic development, fish and wildlife, forestry, information and education, marketing and merchandising, natural resources improvement, recreation and tourism, and water supply and water quality. Some also have loan programs. (see Figure 19)

They provide assistance to a broad and diverse customer base that includes agricultural producers, small business owners, local governments,

other nonprofits, community groups, minorities, people with disabilities, women-owned and operated businesses, low-income landowners, and multi-community and inner-city development groups among others.

In Fiscal Year 2000, RC&D provided technical and financial assistance and grants to regional customers totaling more than \$34 million. More importantly, over 2 million individuals and groups benefited from this assistance.

It is estimated that \$10 - \$12 is generated locally for every RC&D program dollar invested.

Midwest RC&D Areas

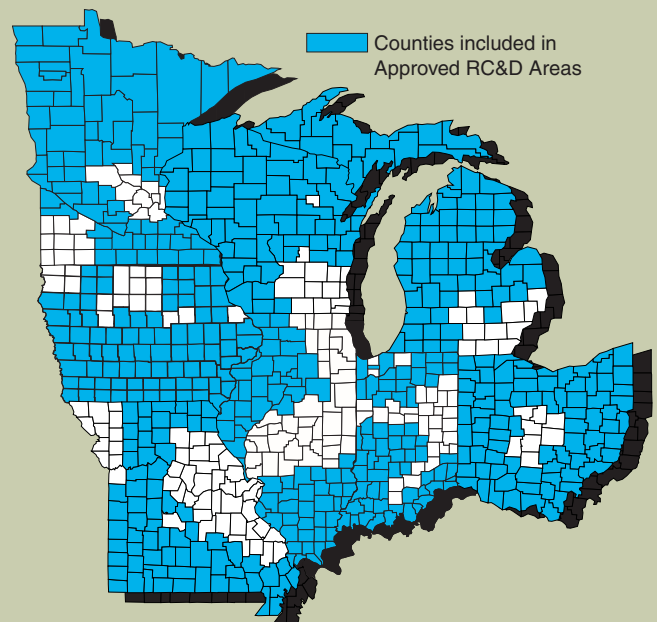


Figure 19

Summary of Farm Economy

Many agricultural producers are facing economical and financial crises as we start the new millennium. At the same time, society is demanding that the condition of the nation's natural resources continue to improve. Most of the improvements will be the result of conservation systems planned and applied on privately-owned land. NRCS will continue to help agricultural producers meet their environmental and economical objectives. Conservation programs administered by NRCS help farmers continue to protect and enhance the environment, while increasing farm family income.

Farm Economy and Conservation Financial Assistance Facts

- On January 1, 1999, USDA indicated that 25 percent of all commercial farm businesses reported negative farm income during 1998.
- Farm prices for many Midwest agricultural commodities are at lows unseen in more than a decade.
- USDA estimated farm income to decline to \$40.4 billion, which is \$8 billion less in 1999 (16 percent decline).
- Currently, we invest \$5 per acre toward management of public lands for every \$1 per acre we invest in private lands.
- NRCS funding level for both financial and technical assistance has averaged about \$233 million per year for the region, since 1994.
- It is estimated that \$10-\$12 is generated locally for every RC&D program dollar invested.

Land Use

This section discusses the changing land use and the loss of agricultural land.

The Midwest Region encompasses an area of roughly 293 million acres, according to the USDA-NRCS 1997 National Resources Inventory (NRI). Cultivated cropland dominates the central part of the region from western Ohio, through Indiana, Illinois, Iowa, and southern Minnesota. In 1997, cultivated cropland accounted for 116.4 million acres or 40 percent of the total midwest acreage. Pastureland and rangeland are major midwest land uses with Wisconsin and Missouri, accounting for 29 million acres. In 1997, forestland comprised 76 million acres, or 26 percent for the region (excluding federal lands). Northern conifer forests cover northern Minnesota, Wisconsin, and Michigan while southern hardwoods cover Missouri, southern Illinois, Indiana, and Ohio.



From 1982 to 1997, the region has seen the following changes:

Losses

Cultivated Cropland ---- 9,814,600 acres
 Pastureland----- 6,441,400 acres
 Rangeland ----- 55,700 acres
 Minor Land Cover-----389,900 acres
 Rural/Transportation ----- 43,700 acres

Total Losses ----- 16,745,300 acres

Gains

Non-cultivated Cropland ---2,168,700 acres
 Forestland -----2,958,600 acres
 Urban -----4,058,000 acres
 Permanent Open Water ----- 42,800 acres
 Water Bodies>40 acres ----- 51,400 acres
 Federal Land ----- 166,700 acres
 CRP -----7,299,100 acres

Total Gains -----16,745,300 acres

The losses are primarily from 6,232,000 acres of cultivated cropland being converted to Conservation Reserve Program (CRP) lands. Most of these changes are occurring around the major metropolitan areas of Detroit, Chicago, Milwaukee, St. Louis, and Minneapolis/St. Paul.

In addition, 430,800 acres of cultivated cropland were shifted to pastureland. Land converted to urban land equals 1,713,900 acres.

Similarly, 1,181,400 acres for forestland and 713,000 acres of pastureland were converted to urban land from 1982 to 1997.

Forestland increased by 3 million acres due to marginal agriculture lands being converted back to forests.